REMARKS

Favorable reconsideration of this application is respectfully requested in view of the foregoing amendments and the following remarks.

Claims 1-18 are pending in the present application, of which claims 1, 7 and 13 are independent.

Acknowledgement of Priority Document Receipt Requested

A certified copy of the priority document was submitted on February, 27, 2004. To date, no official acknowledgement of the USPTO's receipt of the certified copy of the priority document has been noted in the prosecution history. In other words, none of boxes 12.a.1, 12.a.2 and 12.a.3 have been checked on the Summary page (form PTOL-326) of Office Action. The undersigned has no reason to believe that this circumstance implies anything other than a minor oversight on the part of the USPTO. Accordingly, official acknowledgement of the USPTO's receipt of the certified copy of the priority document is hereby respectfully requested.

Noted - IDS Considered

The indication (see attachment to the Office Action mailed October 17, 2007) that the Information Disclosure Statement (IDS) as filed on February, 27, 2004 and August 6, 2007 and references listed therein have been considered is noted with appreciation.

Noted - Drawings Approved

The indication (see present Office Action Summary, box 10(a) as checked) that the Drawings (submitted on February, 27, 2004) have been approved is noted with appreciation.

Claim Rejection Under 35 U.S.C. §103

Claims 1-18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Shinomiya et al. (US Patent 7,188,280, hereinafter, Shinomiya), and in view of Fujii et al. ("Management of WDM self-healing networks", hereinafter Fujii).

INDEPENDENT CLAIM 1

As an example, independent claim 1, as amended, recites (among other things) features of:

> "assuming that a network failure occurs at a location in a current communication path, the current communication path being a single path connecting a plurality of path network nodes in a row, the path network nodes being nodes included in the network nodes, the path network nodes being divided into first path network nodes and second path network nodes, the first path network nodes being nodes that are located on upper stream of the current communication path from the location of the network failure, and the second path network nodes being nodes that are located on down stream of the current communication path from the location of the network failure;
>
> ...
>
> calculating a failure notification time for each network node, the failure notification time indicating a time from when a failure notification message is transmitted by the failure detected network node until the each network node receives the failure notification message;
>
> selecting a first network node based on the failure notification time, out of the first path network nodes that are positioned in the current communication path on the upper stream from the location of the network failure; and
>
> determining an alternative communication path that includes the first network node and a second network node out of the second path network nodes, the second network node being positioned in the current communication path on the down stream from the location of the network failure."

As will be explained below, at least the features of claim 1 are a distinction over each of Shinomiya and Fujii, and thus over their combination.

The examiner asserted that Shinomiya and Fujii teach the features of claim 1 by Fig. 2 (Shinomiya), Fig. 3 (Fujii) and the following description:

"For example, FIG. 2 shows the alternate communication route and the transfer time of failure message transfer time. In FIG. 2-A, an alternate communication route 22 against a failure 21 on the working communication route is shown. Also, in FIG. 2-B, a protecting route 23 against failure 21 is shown."
(Shinomiya, column 4, lines 40-45; underlining added for emphasis)

"When a failure occurs in a link or a node, the nodes adjacent to the source of the failure detect OTS-LOC at optical transmission section termination and send back a OTS-BDI to upstream nodes. The detection of OTS-LOC or OTS-BDI acts as a trigger for the restoration process, and an alternative route-search phase begins.

...

The node that starts the restoration process is called sender node, whereas the destination node for establishing the alternate path is called chooser node."
(Fujii, Section 3.4.1 on page 1030; underlining added for emphasis)

However, Shinomiya and Fujii fail to disclose or teach the features of claim 1:

"assuming that a network failure occurs at a location in a current communication path, the current communication path being a single path connecting a plurality of path network nodes in a row, the path network nodes being nodes included in the network nodes, the path network nodes being divided into first path network nodes and second path network nodes, the first path network nodes being nodes that are located on upper stream of the current communication path from the location of the network failure, and the second path network nodes being nodes that are located on down stream of the current communication path from the location of the network failure;

...

selecting a first network node based on the failure notification time, out of the first path network nodes that are positioned in the current communication path on the upper stream from the location of the network failure; and

determining an alternative communication path that includes the first network node and a second network node out of the second path network nodes, the second network node being positioned in the current communication path on the down stream from the location of the network failure."
(underlining added for emphasis)

The examiner also asserted that Fujii teaches a feature of claim 1 by the following description:

> "Our method for spare capacity assignment assumes that the restoration algorithm selects in the case of a failure the route requiring the shortest time and assigns spare capacity to that route by using a process graph like the working path allocation."
> (Fujii, Section 4 on page 1032; underlining added for emphasis)

However, Fujii fails to disclose or teach the feature of claim 1:

> "calculating a failure notification time for each network node, the failure notification time indicating a time from when a failure notification message is transmitted by the failure detected network node until the each network node receives the failure notification message..."
> (underlining added for emphasis)

Therefore, the noted features of claim 1, namely:

> "assuming that a network failure occurs at a location in a current communication path, the current communication path being a single path connecting a plurality of path network nodes in a row, the path network nodes being nodes included in the network nodes, the path network nodes being divided into first path network nodes and second path network nodes, the first path network nodes being nodes that are located on upper stream of the current communication path from the location of the network failure, and the second path network nodes being nodes that are located on down stream of the current communication path from the location of the network failure;
>
> ...
>
> calculating a failure notification time for each network node, the failure notification time indicating a time from when a failure notification message is transmitted by the failure detected network node until the each network node receives the failure notification message;
>
> selecting a first network node based on the failure notification time, out of the first path network nodes that are positioned in the current communication path on the upper stream from the location of the network failure; and
>
> determining an alternative communication path that includes the first network node and a second network node out of the second path network nodes, the second network node being

> positioned in the current communication path on the down stream from the location of the network failure"

are a distinction over each of Shinomiya and Fujii, and thus over their combination.

Among other things, a *prima facie* case of obviousness must establish that the asserted combination of references teaches or suggests each and every element of the claimed invention. In view of the distinction of claim 1 noted above, at least one claimed element is not present in the asserted combination of references. Hence, the Office Action fails to establish a *prima facie* case of obviousness vis-à-vis claim 1.

Claims 2-6 depend from claim 1, and so at least similarly distinguish over each of Shinomiya and Fujii, and thus over their combination.

Independent claims 7 and 13 incorporate features that correspond to those of claim 1 discussed above, and are, therefore, together with claims 8-12 and 14-18 dependent therefrom, respectively, patentable over the cited references for at least the same reasons.

In view of the foregoing discussion, the rejection of claims 1-18 is improper. Accordingly, withdrawal of the rejection is respectfully requested.

Conclusion

In light of the foregoing, withdrawal of the rejections of record and allowance of this application are earnestly solicited.

Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below.

Please grant any required extensions of time and charge any fees due in connection with this request to deposit account no. 50-1290.

Respectfully submitted,

Dated: April 15, 2009

By /Dexter T. Chang/

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